CLAIMS:

1. A fluorescent lamp whereof the fluorescent layer consists of from 1 tot 3 phosphors, such that said lamp has a peak wavelength in each of the red, green and deep-red wavelength regions, wherein said phosphors are water-dispersible, and wherein said deep-red phosphor has the same basic structure as a non-activated green, water-dispersible phosphor.

2. A fluorescent lamp as claimed in claim 1, wherein said phosphor having a peak wavelength in the red wavelength region is an Eu^{3+} activated phosphor, preferably $Y_2O_3:Eu^{3+}$.

3. A fluorescent lamp as claimed in claim 1, wherein said phosphor having a peak wavelength in the green wavelength region is a Tb^{3+} activated phosphor, preferably selected from the group consisting of $(CeGdMg)Al_{11}O_{19}:Tb^{3+}$; $GdMgB_5O_{10}:Ce^{3+},Tb^{2+}$ and $LaPO_4$: Ce^{3+},Tb^{3+}.

4. A fluorescent lamp as claimed in claim 1, wherein said phosphor having a peak wavelength in the deep-red wavelength region is a Mn^{2+} activated phosphor, preferably $(GdMg)B_5O_{10}:Ce^{2+},Mn^{3}$.

5. A fluorescent lamp as claimed in claim 4, wherein said phosphor having a peak wavelength in the deep-red wavelength region is further activated to show a peak wavelength in the green wavelength region.

6. A fluorescent lamp as claimed in claim 5, wherein said phosphor is a Tb^{3+},Mn^{2+} activated phosphor, preferably $(GdMg)B_5O_{10}:Ce^{3+},Tb^{3+},Mn^{2+}$.

7. A fluorescent lamp as claimed in claim 1, wherein said phosphors consist of:
from 40-70%, preferably 50% b.w. of a red, Eu^{3+} activated phosphor,
from 10-30%, preferably 17% b.w. of a green Tb^{3+} activated phosphor,
from 10-50%, preferably 35% b.w. of a deep-red Mn^{2+} activated phosphor.

8. A fluorescent lamp as claimed in claim 7, wherein said Mn^{2+} activated phosphor is at least partially replaced by a Tb^{3+},Mn^{2+} activated phosphor.

9. A fluorescent lamp as claimed in claim 1, wherein said lamp has a colour point (x, y) wherein x is a number in the range from 0,475 to 0,495, preferably 0,484, and y is a number in the range from 0,390 to 0,405, preferably 0,399.

10. A fluorescent lamp as claimed in claim 1, wherein said lamp has a red percentage LD in the range from 4-8, preferably 6,4.

11. Use of an aqueous suspension of a red, Eu^{3+} activated phosphor, a green, Tb^{3+} activated phosphor and a deep-red, Tb^{3+},Mn^{2+} activated phosphor in the production of a fluorescent lamp.

12. Use according to claim 11, wherein said aqueous suspension consists of
40-70%, preferably 50% b.w. of Y_2O_3:Eu^{3+},
10-30%, preferably 17% b.w. of (GdMg)B_5O_{10}:Ce^{3+},Tb^{3+}, and
10-50%, preferably 35% b.w. of (GdMg)B_5O_{10}:Ce^{3+},Tb^{3+},Mn^{2+}.Abstract